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RESEARCH ARTICLE (ORIGINAL)

Burnout, anxiety and depression in nurses during the COVID-19 pandemic

O Burnout, ansiedade e depressão nos enfermeiros em contexto de pandemia por COVID-19

Agotamiento, ansiedad y depresión entre el personal de enfermería en el contexto de la pandemia de COVID-19

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Abstract
Background: Nurses experienced dissatisfaction and emotional and relational tensions during the COVID-19 pandemic, which may be related to burnout, anxiety, and depression.
Objective: To assess the impact of the COVID-19 pandemic on nurses' burnout, anxiety, and depression.
Methodology: Quantitative descriptive-correlational and cross-sectional study. The nonprobability convenience sample consisted of 234 nurses from a hospital in the archipelago of the Azores. A questionnaire with sociodemographic/general questions, the Hospital Anxiety and Depression Scale (HADS), and the Copenhagen Burnout Inventory (CBI) were administered online and face-to-face. Data were analyzed using the SPSS software. All ethical and legal aspects were respected.
Results: The following aspects were identified: lack of and the prolonged use of personal protective equipment, unfavorable working conditions, decreased professional fulfillment, fear of becoming infected with the virus and infecting family/friends, social isolation, relationship with hierarchical superiors, inadequate remuneration, and lack of administrative practices.
Conclusion: The pandemic context, combined with the social and family context, led nurses to experience symptoms of burnout, anxiety, and depression.

Keywords: burnout; anxiety; depression; nurses; pandemic; COVID-19

Resumo
Enquadramento: A pandemia por COVID-19, acresce aos enfermeiros momentos de insatisfação, tensões emocionais e relacionais, podendo estar relacionadas com o *burnout*, ansiedade e depressão.
Objetivo: Avaliar o impacto que a pandemia por COVID-19 teve nos enfermeiros, relativamente ao *burnout*, ansiedade e depressão.
Metodologia: Estudo quantitativo descritivo-correlacional e transversal. A amostra não probabilística por conveniência, constituída por 234 enfermeiros de um Hospital dos Açores, sendo aplicado um questionário de caracterização sociodemográfica/questões gerais, a *Hospital anxiety and Depression Scale* (HADS) e o *Copenhagen Burnout Inventory* (CBI) de forma online e presencial, os dados foram analisados com recurso ao programa *SPSS*. Todos os aspetos ético-legais foram respeitados.
Resultados: Identificaram-se a falta e uso prolongado de material de proteção individual, condições de trabalho desfavoráveis, diminuição da realização profissional, medo de contrair a doença e infetar familiares/amigos, isolamento social, relação com os superiores hierárquicos, remuneração inadequada e falta de práticas administrativas.
Conclusão: O contexto pandémico, em interligação com o contexto social e familiar, levou os enfermeiros a experienciarem sintomas de *burnout*, ansiedade e depressão.

Palavras-chave: *burnout*; ansiedade; depressão; enfermeiros; pandemia; COVID-19

Resumen
Marco contextual: La pandemia de COVID-19 ha aumentado la insatisfacción y las tensiones emocionales y relacionales del personal de enfermería, que pueden estar relacionadas con el agotamiento, la ansiedad y la depresión.
Objetivo: Evaluar el impacto de la pandemia de COVID-19 en el personal de enfermería en términos de agotamiento, ansiedad y depresión.
Metodología: Estudio cuantitativo, descriptivo-correlacional, transversal. La muestra de conveniencia no probabilística fue de 234 enfermeros de un hospital de las Azores. Se aplicó un cuestionario para caracterizar cuestiones sociodemográficas/generales, la *Hospital anxiety and Depression Scale* (HADS) y el *Copenhagen Burnout Inventory* (CBI) en línea y presencial. Los datos se analizaron con el programa informático SPSS. Se respetaron todos los aspectos éticos y jurídicos.
Resultados: Se identificaron la falta y el uso prolongado de equipos de protección individual, las condiciones de trabajo desfavorables, la disminución de la realización profesional, el miedo a contraer la enfermedad e infectar a familiares/amigos, el aislamiento social, la relación con los superiores, la remuneración inadecuada y la falta de prácticas administrativas.
Conclusión: El contexto de pandemia, en interconexión con el contexto social y familiar, ha llevado al personal de enfermería a experimentar síntomas de agotamiento, ansiedad y depresión.

Palabras clave: agotamiento; ansiedad; depresión; enfermeros; pandemia; COVID-19

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Introduction

The emergence and spread of COVID-19 has had a significant global impact. On March 11th, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic (WHO, 2020d). It was the first time in history that a coronavirus had become a pandemic (WHO, 2020a), resulting in overloaded health services and burnout among healthcare professionals (WHO, 2020c).
Nurses caring for patients with suspected or confirmed COVID-19 suffer from high levels of anxiety and depression for multiple reasons. The pre-existence of burnout may increase symptoms of anxiety, stress, and depersonalization (Miguel-Puga et al., 2020).
The overall aim of this study is to assess the impact of the COVID-19 pandemic on nurses in terms of burnout, anxiety, and depression. Its specific objectives are to analyze how nurses' professional context, symptoms, and experiences during care delivery influence their levels of burnout, anxiety, and depression, as well as to assess their levels of burnout, anxiety, and depression during the COVID-19 pandemic.
This study aims to assess the impact of the pandemic on the levels of burnout, anxiety, and depression experienced by nurses in order to implement preventive measures that can reduce them.

Background

Fifty-nine cases of pneumonia were linked to a market located in Wuhan, China. During this period, a novel etiologic agent (SARS-CoV-2) causing COVID-19 pneumonia was discovered (Direção-Geral da Saúde [DGS], 2020b). This virus spread globally (DGS, 2020a), marking the first pandemic caused by a coronavirus (World Health Organization, 2020b).
Nurses fighting the COVID-19 pandemic were in close contact with people with suspected or confirmed pneumonia. This contact caused them to experience various emotions, including fear of death among themselves, loneliness, and anger, and increased their stress levels (Xiang et al., 2020).
Anxiety is a common emotion associated with stress and fear. Stress is an external pressure exerted on an individual, while anxiety is the emotional response to that stress (Townsend, 2011; American Psychiatric Association [APA], 2014).
Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced professional accomplishment. It occurs as an emotional response to the chronic strain of dealing exhaustively with other human beings, particularly when they have health problems. It differs from other responses to stress due to the harmful effects of the social interaction between professionals and patients (Maslach, 2003).
Due to the nature of the nursing profession, nurses may experience emotional exhaustion, relational disinvestment, and reduced professional accomplishment. To accurately identify the signs of burnout, it is crucial to define and diagnose exhaustion. Clinical staff can use specific scales to assess the degree of overload experienced by care teams (Delbrouck, 2006).
The COVID-19 pandemic increased the influx of people to health services, pushing health systems to the limit, with reports of shortages of medical equipment, human resources, and infrastructure to cope with the influx of patients (Shanafelt, 2020).

Hypotheses

Hypothesis 1: Nurses' high levels of burnout, anxiety, and depression are related to their working conditions while caring for people with confirmed or suspected COVID-19.
Hypothesis 2: Socio-family conditions are related to the development of burnout, anxiety, and depression in nurses.

Methodology

This is a quantitative, descriptive-correlational, cross-sectional study using a non-probability convenience sample. The target population consisted of nurses in a hospital in the Azores. The inclusion criterion was to be a nurse caring for adults with confirmed or suspected COVID-19. Nurses were contacted about this study via an email sent by the hospital's training group. All other nurses were excluded.
Data were collected using a self-administered online and face-to-face questionnaire that included sociodemographic characterization/general questions. Anxiety and depression levels were assessed using the Hospital Anxiety and Depression Scale (HADS) developed by Snaith and Zigmond (1994), cited by Pais-Ribeiro et al. (2007). This scale is divided into two subscales for measuring anxiety and depression. It can also be used in community settings, having been validated for the Portuguese population by Pais-Ribeiro et al. (2007). Burnout was assessed using the Copenhagen Burnout Inventory (CBI) developed by Kristensen et al. (2005) and adapted for the Portuguese population by Fonte (2011). This instrument assesses personal burnout, work-related burnout, and client-related burnout. Data were analyzed using IBM SPSS Statistics software, version 27.0.
This study used a confidence level of 95% and a measurement error of 5%. A total of 234 nurses answered the questionnaire voluntarily and anonymously, in accordance with the ethical and legal standards required for scientific research, after receiving a positive opinion from the Ethics Committee, the Occupational Health Service, and the Board of Directors (S-HDES/2021/517).
The statistical analysis included descriptive statistics (absolute and relative frequencies, means, and standard deviations) and inferential statistics (Cronbach's alpha internal consistency coefficient, Pearson's correlation coefficient, linear regressions, and multivariate analysis of variance [MANOVA]). The MANOVA test was used because the dependent variables were correlated as they were dimensions of the same theoretical construct. Box's

M test was used to check the homogeneity of the variance-covariance matrix. The significance level for rejecting the null hypothesis was (α) ≤ 0.05.

Results

Lack of material was a significant predictor of work- and client-related burnout, explaining between 3.4% and 2.8% of burnout. With regard to anxiety and depression, the perceived lack of material was not a predictor nor statistically significant (Table 1).

The lack of working conditions in clinical practice and the lack of health professionals proved to be significant predictors of personal, work-related, and client-related burnout. As for anxiety, it explained between 2.3% and 7.6% of these variables (Table 1).

The perceived lack of administrative support practices to reduce stress and anxiety among health professionals and inadequate remuneration proved to be significant predictors of personal, work-related, and client-related burnout. Anxiety and depression were significant predictors of anxiety, explaining between 1.9% and 7.1% of these variables (Table 1).

Table 1

Association between lack of material, lack of working conditions, lack of administrative practices and burnout, anxiety and depression

	Personal burnout			Work-related burnout			Client-related burnout		
	B	*p*	Beta	B	*p*	Beta	B	*p*	Beta
Constant	1.788	0.105		1.920	0.080		1.370	0.114	
Lack of material	0.059	0.040	0.095	0.089**	0.031	0.185	0.113*	0.044	0.167
Adjusted R^2	0.009			0.034**			0.028*		
	Personal burnout			Work-related burnout			Client-related burnout		
	B	*p*	Beta	B	*p*	Beta	B	*p*	Beta
Constant	1.168	0.179		1.550	0.138		0.931	0.199	
Lack of conditions	0.189***	0.043	0.276	0.144***	0.033	0.272	0.175***	0.048	0.233
Adjusted R^2	0.076***			0.070***			0.050***		
	Anxiety			Depression					
	B	*p*	Beta	B	*p*	Beta			
Constant	6.562	0.528		5.145	0.522				
Lack of material	0.380	0.204	0.122	0.130	0.201	0.042			
Adjusted R^2	0.015			0.002					
	Anxiety			Depression					
	B	*p*	Beta	B	*p*	Beta			
Constant	5.161	0.927		4.160	0.918				
Lack of material	0.570*	0.224	0.165	0.321	0.222	0.095			
Adjusted R^2	0.023*			0.005					
	Personal burnout			Work-related burnout			Client-related burnout		
	B	*p*	Beta	B	*p*	Beta	B	*p*	Beta
Constant	1.111	0.199		1.513	0.154		1.166	0.224	
Administrative practices	0.206***	0.049	0.266	0.155***	0.038	0.259	0.118*	0.055	0.139
Adjusted R^2	0.071***			0.067***			0.019*		
	Anxiety			Depression					
	B	*p*	Beta	B	*p*	Beta			
Constant	3.865	1.013		2.381	1.001				
Administrative practices	0.906***	0.250	0.232	0.775**	0.247	0.202			
Adjusted R^2	0.054***			0.041**					

*$p < 0.05$ **$p < 0.01$ ***$p < 0.001$.

The correlation coefficients between the dimensions of burnout, anxiety, and depression and the feelings of lack of professional fulfillment were statistically significant, negative, and moderate or weak (Table 2).

Table 2

Correlations between professional fulfillment and burnout, anxiety and depression

	Personal fulfilment
Personal burnout	-.0260***
Work-related burnout	-0.400***
Client-related burnout	-0.363***
Anxiety	-0.199**
Depression	-0.206***

**$p < 0.01$ ***$p < 0.00$.

The correlation coefficients between the dimensions of burnout, anxiety, and depression and the relationship with hierarchical superiors were statistically significant, positive, and moderate or weak (Table 3).

Table 3

Correlations between relationship with hierarchical superiors and burnout, anxiety, and depression

	Relationship with superiors
Personal burnout	0.301**
Work-related burnout	0.400**
Client-related burnout	0.306**
Anxiety	0.191**
Depression	0.161*

*$p < 0.05$ **$p < 0.01$.

The correlation coefficients between the dimensions of burnout, anxiety and depression and missing vacation/rest days were statistically significant, positive, and moderate or weak (Table 4).

Table 4

Correlations between lack of vacation/rest days and burnout, anxiety and depression

	Lack of vacation/rest days
Personal burnout	0.387**
Work-related burnout	0.351**
Client-related burnout	0.267**
Anxiety	0.227**
Depression	0.253**

**$p < 0.01$.

Prolonged use of personal protective equipment (PPE) proved to be a significant predictor of personal and work-related burnout, explaining between 2.3% and 2.4% of these variables. Anxiety and depression were not statistically significant (Table 5).

Table 5

Correlations between prolonged use of personal protective equipment (PPE) and burnout, anxiety and depression

	Personal burnout			Work-related burnout			Client-related burnout		
	B	*p*	Beta	B	*p*	Beta	B	*p*	Beta
Constant	1.298	0.274		1.633	0.212		1.114	0.302	
Prolonged use of PPE	0.144*	0.062	0.151	0.113*	0.048	0.153	0.119	0.068	0.114
Adjusted R^2	0.023*			0.024*			0.013		
	Anxiety			Depression					
	B	*p*	Beta	B	*p*	Beta			
Constant	6.537	1.398		4.399	1.372				
Prolonged use of PPE	0.209	0.316	0.043	0.241	0.310	0.051			
Adjusted R^2	0.002			0.003					

*$p < 0.05$.

In Table 8, Pearson's correlation coefficient shows statistically significant correlations, particularly between fear of infection and anxiety, which is positive and weak ($r = 0.168$; $p < 0.05$).

The correlation coefficient between anxiety and fear of infecting family/friends was statistically significant, positive, and weak (Table 6).

Table 6

Correlations between fear of infecting family/friends and burnout, anxiety and depression

	Fear of infecting family/friends
Personal burnout	0.086
Work-related burnout	0.045
Client-related burnout	-0.016
Anxiety	0.168*
Depression	0.113

*$p < 0.05$.

The correlation coefficients between the dimensions of burnout, anxiety, and depression and social isolation were statistically significant, positive, and weak (Table 7).

Table 7

Correlations between social isolation and burnout, anxiety and depression

	Social isolation
Personal burnout	0.201**
Work-related burnout	0.173**
Client-related burnout	0.289**
Anxiety	0.313**
Depression	0.224**

**$p < 0.01$.

The correlation coefficients between the dimensions of personal and client-related burnout, anxiety and depression and the lack of social/family support were statistically significant, positive, and weak (Table 8).

Table 8

Correlations between lack of social/family support and burnout, anxiety and depression

	Social support
Personal burnout	0.144*
Work-related burnout	0.114
Client-related burnout	0.182**
Anxiety	0.215**
Depression	0.194**

*$p < 0.05$ **$p < 0.01$.

Through simple regression, the fear of becoming infected proved to be a significant predictor of personal burnout. Anxiety and depression explained 2% to 5% of these variables (Table 9).

Table 9

Fear of becoming infected and burnout, anxiety and depression

	Personal burnout			Work-related burnout			Client-related burnout		
	B	*p*	Beta	B	*p*	Beta	B	*p*	Beta
Constant	1.481	0.176		1.972	0.138		1.414	0.196	
Fear of becoming infected	0.117*	0.045	0.169	0.040	0.035	0.076	0.058	0.050	0.076
Adjusted R^2	0.028*			0.006			0.006		
	Anxiety			Depression					
	B	*p*	Beta	B	*p*	Beta			
Constant	4.478	0.881		3.608	0.879				
Fear of becoming infected	0.781***	0.224	0.223	0.484*	0.223	0.141			
Adjusted R^2	0.050***			0.020*					

*$p < 0.05$ ***$p < 0.001$.

With regard to substance use, Table 10 shows that the differences in anxiety and depression scores as a result of substance use were not statistically significant. Burnout scores were statistically significant. Participants who used substances had significantly higher work-related burnout scores.

As for generalized anxiety symptoms, depression scores related to experiencing generalized anxiety symptoms were statistically significant. Burnout scores related to experiencing generalized anxiety symptoms were statistically significant.

Participants with insomnia had significantly higher anxiety and depression scores. The differences in burnout scores related to experiencing insomnia were statistically significant.

Table 10

Comparison between substance use, generalized anxiety symptoms, insomnia, and burnout, anxiety, and depression

Substance use					
	No		Yes		
	M	*SD*	*M*	*SD*	*p*
HADS					
Anxiety	7.34	3.50	8.43	3.91	160
Depression	5.45	3.51	5.48	3.27	0.966
Burnout					
Personal	1.90	0.69	2.19	0.73	.058
Work-related	2.09	0.54	2.42	0.49	.006**
Client-related	1.61	0.76	1.88	0.81	.113
Generalized anxiety symptoms					
	No		Yes		
	M	*SD*	M	*SD*	*p*
HADS					
Anxiety	6.33	3.24	9.69	3.03	0.001***
Depression	4.46	3.24	7.37	3.13	0.001***
Burnout					
Personal	1.75	0.69	2.27	0.59	0.001***
Work-related	2.02	0.53	2.34	0.51	0.001***
Client-related	1.47	0.75	1.97	0.69	0.001***
Insomnia					
	No		Yes		
	M	*SD*	M	*SD*	*p*
HADS					
Anxiety	6.91	3.41	8.97	3.49	0.001***
Depression	4.98	3.43	6.76	3.30	0.001***
Burnout					
Personal	1.84	.071	2.16	0.63	0.002**
Work-related	2.07	0.56	2.30	0.045	0.004**
Client-related	1.54	0.77	1.91	0.070	0.001***

Note. *M* = Mean; *SD* = Standard deviation.
** $p < 0.01$ *** $p < 0.001$.

No statistically significant differences were found for suicidal thoughts, post-traumatic stress symptoms, phobias, panic attacks, hypochondria, generalized anxiety, and insomnia.

Discussion

Regarding Hypothesis 1, it would be expected that the factors that contribute to increased burnout, anxiety, and depression in nurses in the work environment would be the lack of professional fulfillment, lack of working conditions, relationship with hierarchical superiors, lack of vacation/rest days, lack of administrative practices, prolonged use of PPE, and working with people with suspected or confirmed COVID-19, which is corroborated by Janeway (2020), Zhang et al. (2020), and Han et al. (2020).

Lack of PPE was a contributing factor to increased levels of anxiety/depression and burnout. The higher the perceived lack of material, the higher the levels of work-related and client-related burnout (Table 1). Surrati et al. (2020) reported that more than half of the health professionals did not feel confident about the supply of materials, and their shortage was seen as a factor leading to an increase in the number of infected people. However, Çelmeçe and Menekay (2020) state that this is a concern for health professionals because of the difficulty in accessing them. Feelings of lack of personal fulfillment led to increased burnout, anxiety, and depression. Lack of professional fulfillment is associated with higher levels of burnout, anxiety, and depression (Table 2).

Professional fulfillment is a protective factor against the development of burnout (Oliveira et al., 2021). A decrease in professional fulfillment, caused by feelings of dissatisfaction with work activities, feelings of inadequacy, low self-esteem, professional failure, and demotivation, indicates low effectiveness at work (Pereira, 2002).

This study revealed that the higher the perceived lack of working conditions in clinical practice and the shortage of health professionals, the higher the levels of personal, work-related, and client-related burnout and anxiety (Table 1). According to Souza et al. (2020), working conditions for nurses deteriorated during the pandemic period. Surrati et al. (2020) state that the shortage of human resources and the high workload increased work-related stress.

The increase in burnout and anxiety/depression was associated with the relationship with hierarchical superiors. This study found that the higher the feeling that the relationship with hierarchical superiors was a stress factor, the higher the levels of burnout, anxiety, and depression (Table 3).

A stressful work environment increases workers' dissatisfaction. Hierarchical superiors should consider incorporating elements such as motivation, conflict management, training, development, support, safety and innovation in work organization, stress management programs, hiring more health professionals, planning working hours, and planning a rest environment (Çelmece & Menekay, 2020; Diogo et al., 2021), spiritual support (Giusti et al., 2020), financial compensation measures, support from managers and clear instruction on COVID-19 procedures and knowledge (Zhang et al., 2020).

It was hypothesized that the lack of vacation/rest days would lead to higher levels of burnout, anxiety, and depression. Perceived lack of vacation/rest days led to higher levels of burnout, anxiety, and depression (Table 4).

The statements revealed agreement on financial compensation, which is considered a compensatory measure for nurses working in a pandemic context (Decree Law 101-B/2020, of December 3), although nurses still consider the compensation to be inadequate. This measure is intended to promote social and psychological well-being (Zhang et al., 2020).

Administrative support practices to reduce the stress and anxiety among healthcare professionals and inadequate pay were identified as contributing factors to reducing burnout, anxiety, and depression. This study found that the higher the perception of administrative support practices to reduce stress and anxiety among healthcare professionals and inadequate compensation, the higher the levels of burnout, anxiety, and depression (Table 1). The lack of administrative support practices to reduce stress and anxiety among health professionals was a contributing factor to the development of burnout, anxiety, and depression, revealing the need for support from health institutions, counseling and psychotherapy practices for employees (Diogo et al., 2021; Zhang et al., 2020), stress management programs and recruitment of more nurses, planning of working hours, and the creation of rest environments (Çelmeçe & Menekay, 2020).

Prolonged use of PPE was positively associated with physical exhaustion and injuries, and contributed to higher levels of burnout, anxiety, and depression. The longer the use of PPE, the higher the levels of personal burnout and work-related burnout (Table 5).

According to Hu et al. (2020), prolonged use of PPE and the skin lesions it causes contribute to increased levels of burnout, anxiety, and depression. Zhang et al. (2020) attribute this to skin lesions and their discomfort.

Regarding Hypothesis 2, it is assumed that socio-family conditions are related to the development of burnout, anxiety, and depression in nurses.

The aim was to prove that the fear of infecting family/friends is related to higher levels of burnout, anxiety, and depression. The higher the fear of infecting family/friends, the higher the levels of anxiety (Table 6). Fear of infecting family/friends reduces nurses' socialization (Paula et al., 2021).

During the COVID-19 pandemic, nurses suffered from fear of infection and death, as well as fear of spreading the virus to family members (Han et al., 2020; Zhang et al., 2020), leading to burnout (Han et al., 2020), anxiety, and depression (Han et al., 2020; Hu et al., 2020).

With social isolation, it was expected that nurses would show increased levels of burnout, anxiety, and depression. This study found that the higher the feelings of social isolation, the higher the levels of burnout, anxiety, and depression (Table 7).

The COVID-19 pandemic has brought about significant changes. Quarantines have resulted in people, including nurses, spending more time indoors with limited interaction, which has a negative impact on physical and mental health. The fear of spreading the virus among family and friends contributes to this isolation and reduced contact with those closest to them, leading to lifestyle changes, social distancing, and feelings of guilt (Surrati et al., 2020).

Nurses with a lack of social/family support had higher levels of burnout, anxiety, and depression. The higher the feelings of lack of social/family support, the higher the levels of burnout, anxiety, and depression (Table 8).

The lack of social/family support has been linked to the development of burnout (Giusti et al., 2020), anxiety, and depression (Hu et al., 2020) among nurses, who reported homesickness due to separation from their families during the pandemic (Zhang et al., 2020).

Nurses fear becoming infected and spreading the disease,

so they avoid being with their family and friends (Han et al., 2020), which reduces support from family and friends (Pereira, 2002).
The fear of becoming infected contributed to the development of burnout, anxiety, and depression. The greater the fear of becoming infected, the higher the levels of personal burnout, anxiety, and depression (Table 9).
There is a consensus among the authors that the fear of becoming infected is strongly associated with the possibility of spreading the disease to those around the nurses (Giusti et al., 2020; Han et al., 2020; Hu et al., 2020; Surrati et al., 2020; Zhang, 2020), thus increasing their levels of burnout (Giusti et al., 2020), anxiety (Han et al., 2020; Hu et al., 2020), and depression (Han et al., 2020; Hu et al., 2020).
The most common warning signs identified by nurses were substance abuse (9.8%), generalized anxiety symptoms (33.3%), and insomnia (26.1%; Table 10), while the other aspects analyzed were not statistically significant. Substance use was not associated with the levels of anxiety and depression. However, it was associated with work-related burnout, namely with higher use of substances such as alcohol, drugs, medication, and tobacco. Janeway (2020) reported that warning signs of depression such as isolation, apathy and lack of interest, substance/alcohol abuse or dependence, suicidal thoughts, post-traumatic stress symptoms, phobias, panic attacks, hypochondriasis, intrusive generalized anxiety or obsessions, and insomnia worsened during the pandemic. Insomnia is strongly associated with anxiety, depression, and burnout (Miguel-Puga et al., 2020).
One limitation of this study was that the population was predominantly female, making it difficult to draw conclusions about men. Another limitation was the paucity of research linking the three issues - burnout, anxiety, and depression - in the context of a pandemic, making it difficult to determine which factors were influenced by the pandemic and which existed prior to the pandemic outbreak.
The pandemic itself also limited the implementation of this study. Waiting times for approval of the requests submitted to the ethics committees and the Board of Directors were longer, delaying the course of this study.

Conclusion

With the emergence of the COVID-19 pandemic, changes in nurses' dynamics and work have occurred that have created new challenges to mental health.
Levels of burnout, anxiety, and depression were influenced by multiple factors, some pre-existing and others exacerbated by this new circumstance.
Nurses' experiences were varied. In the work environment, various causes can be identified, such as lack of materials, unfavorable working conditions, decreased professional fulfillment, fear of becoming infected, relationships with superiors, and prolonged use of PPE. In the socio-family context, nurses reported fear of infecting family and friends, social isolation, generalized anxiety symptoms, insomnia, and substance abuse as factors for higher burnout, anxiety, and depression. In view of the situation they experienced, nurses felt that their remuneration was inadequate for the work they developed during the pandemic and reported a lack of administrative practices. Therefore, we suggest measures to reduce burnout, anxiety, and depression among nurses, such as programs to monitor nurses' health, the provision of adequate equipment, and appropriate working conditions, which are a priority for these professionals.
Good communication with superiors and managers, measures to promote workers' well-being, vacation/rest days, encouraging contact with family and friends, and reducing the duration of PPE use should also be considered to restore nurses' well-being.
Future studies should conduct a comparative analysis between nurses on the island of São Miguel and the other islands of the Autonomous Region of the Azores and identify the stress factors that the COVID-19 pandemic has brought to nurses and those that already existed.

Author contributions
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